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SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAC

1-0188

AD-A212 445

1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		1b. RE: DTIC	
2a. SECURITY CLASSIFICATION AUTHORITY ELECTE		3. DIS: UNLIMITED	
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE 15 1989			
4. PERFORMING ORGANIZATION REPORT NUMBER(S) D C S D		5. MONITORING ORGANIZATION REPORT NUMBER(S)	
6a. NAME OF PERFORMING ORGANIZATION ARD Corporation	6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MONITORING ORGANIZATION	
6c. ADDRESS (City, State, and ZIP Code) 5457 Twin Knolls Road Columbia, Maryland 21045		7b. ADDRESS (City, State, and ZIP Code)	
8a. NAME OF FUNDING/SPONSORING ORGANIZATION U.S. Army Research Institute	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER MDA903-87-C-0067	
8c. ADDRESS (City, State, and ZIP Code) 5001 Eisenhower Avenue Alexandria, Virginia 22333-5600		10. SOURCE OF FUNDING NUMBERS	
		PROGRAM ELEMENT NO. 65502A	PROJECT NO. 2P66502 M770
		TASK NO. 45B	WORK UNIT ACCESSION NO. 04
11. TITLE (Include Security Classification) The Development and Implementation of Career Information and Guidance Systems to Enhance Recruitment and Retention of ROTC Cadets for Army Careers.			
12. PERSONAL AUTHOR(S) Banikiotes, Paul Gregory Webster, Karen Kelly			
13a. TYPE OF REPORT Final Report	13b. TIME COVERED FROM 3/5/87 TO 11/5/87	14. DATE OF REPORT (Year, Month, Day) 1987, November 5	15. PAGE COUNT 49
16. SUPPLEMENTARY NOTATION			
17. CCSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)	
FIELD	GROUP	SUB-GROUP	
19. ABSTRACT (Continue on reverse if necessary and identify by block number) The Career Information Survey (CIS) was developed and administered with two existing instruments, the Career Development Inventory (CDI) and the Values Scales (VS), to a group of 64 college-bound high school males. Students with positive, neutral, and negative attitudes about the Army ROTC program were compared on the CDI and VS scales and on four variables measured by the CIS: knowledge and importance of knowledge about the Army ROTC program; credibility of sources of information and advice about the Army ROTC program; desirability of occupations within military and non-military settings; and preferences for alternative military career paths. The results indicated that knowledge about Army ROTC and most specifically knowledge about career prospects is strongly related to having a positive attitude about the Army ROTC program. Accurate information can best be received from military personnel and good advice can best be received from educational personnel. Although the Army military setting overall is less appealing than the government and private sectors, it is equally appealing for those			
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS		21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED	
22a. NAME OF RESPONSIBLE INDIVIDUAL Dr. Michael Drillings		22b. TELEPHONE (Include Area Code) (202) 274-5572	22c. OFFICE SYMBOL PERI BR

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with positive attitudes about the Army ROTC program who plan careers in the sciences. Various active and reserve duty career paths appeal to different types of individuals. Individuals with a more positive attitude about the Army program are more planful about their careers than those with neutral and negative attitudes. Suggestions for future efforts include: refining the CIS; collecting data from other regions, college students (both within and outside of the Army ROTC) and females, both in high school and college; gathering additional information to further explore individual differences; pilot testing of recruitment efforts using both pencil and paper testing and physiological measurement technology to examine experimentally manipulated variables such as type and source of information and modality of presentation; and developing model career information and counseling programs for implementation at several campus ROTC units.

(SDW)

Contract #: MDA903-87-C-0067

Contractor: ARD Corporation

Contract Expiration Date: 11/5/87

Project Director:

Paul G. Banikiotes

Dollar Value: \$49,929.00

Telephone: (301) 997-5600

Title: Career Guidance - ROTC Cadets

Sponsor: U.S. Army - ARI

FINAL REPORT

The Development and Implementation of Career Information and Guidance Systems to Enhance Recruitment and Retention of ROTC Cadets for Army Careers.

"The views, opinions and findings contained in this report are those of the authors and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other official documentation."

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ABSTRACT

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INTRODUCTION

The importance of the provision of career information is critical in the career development process. Rather than waiting for individual problems to develop, many psychologists and counselors have developed programs directed at assisting effective career development. Banikiotes (1973) has identified the school as the primary target institution for preventive and developmental programs. Banikiotes and Bartlett (1983) have reviewed the literature describing how programmatic interventions of schools have an important effect on the vocational development of our youth. The significance and importance of these programs has been demonstrated repeatedly. The past decade has seen substantial growth in the implementation of career guidance and development programs in business, industry and government (Knowdell, 1982; Leibowitz, 1980). Several phenomena have been identified as contributing to the emergence of such programs (Knowdell, 1984): technological change; social change; management selection and development; and succession planning and manpower forecasting.

Career information and guidance systems are especially important in affecting the perceptions of careers and the decisions individuals make regarding the career directions that they pursue. The positive perception of a career as an Army officer can greatly enhance the possibilities of attracting and retaining our most outstanding and capable youth. Certain changes occurring in our society can provide an opportunity for a military career to be perceived in a more positive manner. For example, greater career consciousness exists among our youth. There are increasing difficulties in securing meaningful employment following a college education. A college education no longer guarantees stable employment which will lead to reasonable compensation. A military career can offer stability and security. Furthermore, escalating expenses for a college education require an increasing proportion of students to seek outside financial funding for their schooling, and ROTC is one possible source of such funding.

The world of work is changing rapidly. There is an increasing focus on technology and the need to receive continual training to remain current with state-of-the-art technologies. Such need applies to almost any career. No longer does one prepare himself or herself for a career and remain in that career with the same body of knowledge that was learned during the formal educational process. Today, it is important to remain current and to be involved in continuing training and education. Career choices and employment decisions are increasingly affected by an individual's perceptions of prospects for growth and development in the future.

Previous investigators have examined the aspirations of American youth and their perceptions of the ROTC and the military (Hicks, Collins, & Weldon, 1979). Among the factors investigated were demographic profiles, school and educational aspirations, job plans and aspirations, perceptions about ROTC and the military, and factors related to ROTC and commitment to an Army career. The results of data from 2,131 students showed that ROTC and JROTC cadets were primarily male. Significantly more cadets than noncadets were black, from lower-income families, from the South, and more likely to have friends and family in the military. The strongest influences for their entering ROTC were parents and military personnel. College cadets' own attitudes were more positive toward the military than were those of noncadets. In addition, noncadets did not possess much accurate information about ROTC.

An investigation which involved an analysis of junior officer training needs was carried out to insure that the precommissioning training for ROTC cadets is both comprehensive and relevant (Wellins, Rumsey, & Gilbert, 1980). Some 1,300 officers, NCOs and enlistees were interviewed and surveyed in the field to determine problems encountered by officers in the field, evaluate ROTC curriculum and gather suggestions for improving ROTC training. The problems encountered were of an interpersonal and organizational nature, including relationships with subordinates, military justice, discipline, counseling, and command and leadership. Methods for improving ROTC training were discussed. The results demonstrate that being counseled as well as learning how to counsel is an important part of the ROTC experience.

Our current youth is more career conscious than they have been in the past. Such career consciousness has probably led to more positive perceptions and attitudes about the desirability of a military career. Moreover, much more can be done to foster even more positive attitudes and perceptions concerning the desirability of a military career. A key factor in promoting such positive attitudes is career information and guidance that potential ROTC candidates and individuals in the early phases of the ROTC program receive. The type of career information and guidance that is received and the means by which it is presented may have a powerful effect on students considering and those aspiring to a career as an Army officer.

Career maturity is an important construct which emerges from the examination of career theories taking a developmental focus. It is defined as an attitudinal and cognitive readiness to cope with the developmental tasks of finding, preparing for, getting established in, pursuing and retiring from an occupation, depending upon the life stage of the individual (Super, 1984). From this perspective, individuals pass through a relatively

systematic series of stages in career development as they progress through the lifespan. The measurement of this variable allows an assessment of the rate and progress of the sequence of these activities for an individual. The individual can then be classified depending upon how far he or she is from an expected norm.

Work values is a second construct which is valuable both in research and career guidance. Values that an individual holds are clearly an important factor in determining career choice, according to Katz (1973). The Work Importance Study (WIS; Super, 1982) evaluated the work values of adults and youth. Work values were found to be of two types: extrinsic - concomitants or outcomes of work (security, collegueship, prestige, social interaction); and intrinsic - aspects inherent to the activity itself (creativity, skill utilization). An ability to effectively measure a structure of these values provides an individual with important input data regarding career decisionmaking.

The Army Research Institute for the Behavioral and Social Sciences has investigated attitudes toward counseling and career development provided to Army Officers (McPherson, Eastman, & Yates, 1978). In general, officers felt a need for more guidance and information at critical career decision points. While they preferred counseling by a trained, knowledgeable counselor, they considered a computer-aided system an acceptable source of information for specific data on potential assignments and assignment options. They also found that officers who lacked information or did not understand the assignment procedures were likely to consider the Army system arbitrary and irrational, and were somewhat less likely to make the Army a career.

Subsequently, the Army Research Institute did develop and test a computerized career information and planning system for Army officers (Oliver & Day, 1977; Phillips, Cairo, Myers, Ryan, Hoffer & Croes-Silverman, 1980; Myers, Cairo, Turner & Ginzberg, 1980). Although the system is not operational, its feasibility and usefulness were established. Recent advances in computer technology make such a system more attractive, particularly for use in ROTC.

The primary focus of previous studies investigating background characteristics and attitudes was to use these factors as predictor variables of performance and retention. In this current study, instrumentation has been selected and developed and a pilot study conducted to examine attitudes about the military as an outcome criterion affected by a variety of career information factors.

METHOD

Identification of Variables

The first part of this effort has involved the identification and development of instrumentation to assess the variables of interest as attitudes toward and perceptions of the Army ROTC program are related to a range of career dimensions. Specifically, existing instrumentation was used for measurement of career maturity and values, whereas new instrumentation was developed for assessing background information, knowledge and importance of knowledge about ROTC, credibility of sources for accurate information and good advice, desirability of particular occupations in selected military and non-military settings, perception of alternative active duty and reserve duty career paths, and attitudes and feelings about Army ROTC.

Existing Instrumentation

Career Maturity

The Career Development Inventory (CDI; Super, Thompson, Lindeman, Jordaan, & Myers, 1981) was chosen as the measure of career maturity as a result of its overall utility for the purposes required in this current research program. The nature of its sub-scales, its reliability and validity, the variety of forms designed for high school and college use, and its history of successful use in research and applied settings make it the instrument of choice for this application.

Indices of career development include occupational awareness, planfulness, the desire to explore the world of work, recognition of changes in vocational development tasks with age and social responsibility, and knowledge of the world of work and of appropriate occupations. As the educational level increases, the occupational implications of career decisions become clearer. Questions regarding the time at which to initiate instruction in specific vocational and professional disciplines, the appropriate points for choices between courses leading to different types of education, and the readiness of a student or group of students are very important and need to be answered (Mitchell, 1979).

Research in assessing career development and vocational or career maturity was initiated in 1951 (Super, Crites, Hummel, Moser, Overstreet, & Warnath, 1957). Such research paved the way for the development of practical measures, and then led to test and inventory development work, underway since 1967 (Myers, Thompson, Lindeman, Super, Patrick, & Friel, 1972). The CDI has a School Form, designed for use in junior and senior high schools, and a College and University Form, for use in higher

education. The forms are similar in rationale and structure. They differ in item content, which is adapted to the appropriate options and levels of education.

The CDI consists of eight scales. Five scales assess specific dimensions of career development, two measure two group factors (conative and cognitive), and one combines the two factors to provide a total score.

- Career Planing (CP) comprises 20 items involving the report of career planning activities in which the student has been engaged and the degree of such engagement.
- Career Exploration (CE) comprises 20 items rating specific individuals, printed materials and media as sources of career information and for usefulness of information.
- Decisionmaking (DM) comprises 20 brief sketches of people making decisions and assesses the ability of the students to apply knowledge and insight to the career planning and decisionmaking situations presented.
- World-of-Work Information (WW) comprises 20 items which assess knowledge of career development tasks, occupational structure and techniques for getting and holding a job.
- Knowledge of the Preferred Occupational Group (PO) consists of 40 multiple choice questions that pertain to all occupations. After identifying the group that interests him/her the most, the student answers the questions with that group in mind.
- Career Development-Attitudes (CDA) combines CP and CE to measure attitude.
- Career Development-Knowledge and Skills (CDK) combines DM and WW to measure knowledge and skills.
- Career Orientation Total (COT) combines CP, CE, DM and WW. This approaches a global measure of overall career or vocational maturity.

Reliability for the CDI has been established by both internal consistency analyses and short-term-test-retest analyses (Thompson & Lindeman, 1981). The measure of internal consistency (Cronbach alpha coefficients) for the combined scales of the CDI ranges from .79 to .88 with a median of .86 for the variety of gender-grade in school categories.

Test-retest correlations over a three-week period ranged between .70 to .90 for the combined scales (CDA, CDK, and COT) and for scale CP.

Validity for the CDI has been examined in a number of ways. The CDI is based on a theoretical model developed and tested in the Career Pattern Study. This model has been tested independently by Gribbons and Lohnes (1968, 1969), Asis (1971), Vriend (1963), and Willstach (1966). Crites (1973) slightly modified the model and further tested it, and Super (1974) further refined the model in light of accumulated evidence. The model postulates five basic dimensions, the measures of which show varying degrees of intercorrelation, sufficient to justify the use of the general construct of career maturity, but low enough to make clear its multidimensionality. The identified dimensions are planfulness, exploration, decisionmaking, general world-of-work information, knowledge of preferred occupation, and reality orientation. There are close parallels between this model and the items on the scales of the CDI.

Evidence of the CDI's construct validity is based on subgroup differences (gender, grade and program) and on the factor structure of the instrument. Career maturity is a developmental characteristic which should increase as students progress from the 9th to 12th grade. Such an increase has been observed across grade levels for all separate and combined scales. Infrequent yet moderate gender differences have been observed to occur in grades 11 and 12 on DM and WW, the cognitive scales. Females tend to make higher scores consistent with the gender differences often observed in academic achievement. Differences have been observed among grade 10 to 12 students in various curricular programs. On the cognitive scales students in honors programs were observed to have higher scores than other students. Students in college preparatory and business programs tended to have higher scores than those in general and vocational programs. On the conative or attitudinal scales, the vocational/technical students scored higher, likely reflecting their earlier entrance into the work force and thus the planning and exploration necessary for such entrance. Factor analyses for the five separate CDI scales by gender and grade has resulted in two factors. The CD and CE scales had high loadings on one factor, and the DM, WW and PO had high loadings on the other, consistent with the attitudinal and cognitive factors which are being measured. Sufficient content and construct validity for the use of the CDI in this application has been demonstrated.

Work Values

The Values Scale (VS; Nevill & Super, 1986) was chosen as the measure of values as a result of its overall utility for the purposes required in this current research program. Its focus

on values related to the world of work, the nature of its subscales and its reliability and validity make it the instrument of choice for this application.

The VS was developed by the Work Importance Study (WIS), an international consortium of vocational psychologists in a dozen countries. The objective of this collaborative effort was twofold: 1) to understand the values that individuals seek or hope to find in various life roles; and 2) to assess the relative importance of the work roles as a means of value realization in the context of other life roles.

Super (1970) describes values as the objectives sought in behavior and interests as the activities in which the values are sought. A given value may be satisfied in more than one kind of activity, but the connection between goal and activity is closer for values than for needs. The VS is designed to measure both intrinsic and extrinsic values, the former being inherent in the activity and the latter concomitants or outcomes of the activity.

The VS contains 106 items and is scored for 21 values, some of which are independent while others are interrelated but can be conceptually differentiated. The values measured are: ability utilization, achievement, advancement, aesthetics, altruism, authority, autonomy, creativity, economic rewards, lifestyle, personal development, physical activity, prestige, risk, social interaction, social relations, variety, working conditions, cultural identity, physical prowess, and economic security.

The measures of reliability were computed for the VS: 1) internal consistency (alpha coefficients) for high school, college and adult samples; and 2) stability (test-retest) for the college sample. Alpha coefficients for the 5-item VS scales were generally above .70 for all three populations. Test-retest correlations of less than .70 were found for several of the 5-item scales. Ability Utilization, Life Style and Personal Development failed to reach reliabilities of .70 on both internal consistency and stability measures.

The face validity of the VS was assured by the writing of the items according to the agreed upon definitions of the values. Three specialists from different countries wrote the items, and all project directors reviewed the items for face validity. The development process included item-scale correlations and factor analytic procedures designed to assure internal consistency and scale independence.

The observation of trends in gender differences and across age groups contributes to the construct validity of the VS. In high school, females tended to value Altruism more than males, while

males tended to value Risk and Physical Prowess more than females. In college, only the difference in Physical Prowess remained. The high school sample scored higher on Physical Prowess, Physical Activity, and Risk than the college sample. Close inspection of the factor structure gives further support for the construct validity of the VS. Eight of the value scales factor into essentially the same six factors for all three samples. Several factors changed across the three groups in a manner consistent with age changes. In the area of economics, high school students think primarily in terms of advancement and are not concerned about the economics of the marketplace. College students have learned economic rewards and advancement go together, but see economic security as a separate entity. Also, high school students see Physical Activity and Physical Prowess as two independent factors with the latter factored with Risk, and thus more related to thrill-seeking. By college age and adulthood, Physical Activity and Prowess are viewed as a single factor with the emphasis on using one's physical abilities in sports. Further evidence of construct validity comes from cross-national studies in which the factor structure of the VS was found to be similar in samples of students from various countries (Sverko, 1982; Lokan, 1983).

Instrumentation Developed for the Current Study

The primary purpose of this first phase study was the development of the instrumentation to examine how attitudes and perceptions of Army ROTC are related to a number of career-oriented variables. The Career Information Survey (CIS) was developed in order to assess the variables of interest for subsequent phases of this program of research.

The CIS consists of six sections: 1) Background Information; 2) Knowledge and Importance of Knowledge about ROTC; 3) Credibility of Sources; 4) Perceptions of Occupations and Settings; 5) Preferences for Military Career Paths; and 6) Attitudes and Feelings about Army ROTC. A description of each of these sections of the CIS follows.

Background Information

The purpose of the Background Information section is to gain identifying data about each individual related to age, educational experience, academic performance, academic interests, extracurricular interests, educational goals, and family background. Some of these variables have previously been observed to be related to attitudes and perceptions of a military career, and gathering such data will allow for further comparisons. Items for this section were written to parallel items on the U.S. Army Cadet Command ROTC Student Survey in order to allow for comparisons with that instrument.

Knowledge and Importance of Knowledge About ROTC

An especially important factor in determining attitudes and perceptions is knowledge. It is therefore particularly important to assess the knowledge that exists among individuals and relate this knowledge to the attitudes and perceptions that they hold. Of further significance is to identify what knowledge is important. Knowing what knowledge is important can determine the specific type of information that should be presented and can contribute to the shaping of attitudes and perceptions in a positive manner. Individuals are asked to assess three informational aspects of Army ROTC using eleven items. This information includes knowledge about college, post-college commitments, and career prospects. It is rated on a five point scale from "no knowledge" to "very much knowledge." Additionally, these same aspects of Army ROTC are rated with regard to the importance of knowledge about such aspects to the individuals on a five-point scale from "not important" to "extremely important."

Credibility of Sources

Attitudes and perceptions are strongly affected by the sources which provide information and advice. The purpose of this section was to determine how individuals valued a variety of sources that might provide information and advice about the Army ROTC program. Each source was rated on a 5-point scale from "not valuable" to "extremely valuable" regarding the provision of "accurate information" and "good advice." The range of sources that were rated included family members/friends, educational personnel, and military personnel.

Perceptions of Occupations and Settings

It is important to understand how various occupations and the settings in which they are held are perceived. The occupations chosen covered a wide range of jobs that college-educated individuals might enter and which are also represented in the military. The eight occupations included those in the medical, legal, health service, sciences, engineering, business and computer areas. The individuals rated each of the occupations in general, and then rated the desirability of an individual holding the occupation in each of four settings. The settings included: Army-military; Army-civilian; government non-military; and private sector. Each occupation and occupation-setting combination was rated on a seven-point scale from "highly undesirable" to "highly desirable." Comparisons of reactions to particular settings and occupations can be made, and in addition, interactions of settings and occupations can determine whether preference for settings might vary across different type of occupations.

Preferences for Military Career Paths

The purpose of this section was to compare reaction of individuals to career paths which vary according to a number of dimensions. These include: point of entry into ROTC; length of service, and combinations of active and reserve duty. Eight comparisons of two matched career paths were made. After reading each career path (A and B), the individual rates it on a five-point scale from "very undesirable" to "very desirable." Then, the individual indicates which of the career paths is more desirable, with the possibility of answering "neither."

Attitudes and Feelings About Army ROTC

Attitudes and feelings about Army ROTC were measured by individuals responding to a question which asked them to indicate what best describes their attitudes and feelings about ROTC on a nine-point scale from "extremely positive" to "extremely negative." Additionally, the individuals were asked how they would respond to an opportunity to enter the Army ROTC program by answering "Yes" or "No." Furthermore, individuals were asked in an open-ended manner to indicate both the "advantages" and "disadvantages" of enrolling in the Army ROTC program.

Procedures for Instrumentation Review

ARD project team members were involved in the development of the initial draft through the selection and writing of specific items relevant to each of the sections of the CIS. This initial draft was reviewed by the ARD project team members in order to avoid item redundancy, to integrate the items in a consistent manner, and to contribute to face validity through determining that each particular item related to the purpose of each specific scale. A second draft was then developed for further internal review and for presentation to a group of prominent subject matter experts who could contribute additional information regarding their own expertise. This group of subject matter experts was composed of individuals from a variety of settings, including the military, academic and business sectors.

The positions held by the specific individuals who reviewed the second draft were: Director of a University Counseling Center; Chairman of a University Psychology Department, Assistant Director of a University Placement Center; Research Psychologist and Human Factors Specialist; Brigadier General in the Army Reserves as well as a Director of Marketing in his civilian employment; and the Lieutenant Colonel, Chief of Marketing Research and Analysis for the ROTC Cadet Command, representing the input from his department. Each of these individuals was able to make a unique contribution to the development of the

instrument based upon his knowledge of characteristics of the sample, aspects of Army ROTC and military service, and/or general knowledge about the development and use of survey instrumentation. Each person was sent the instrument in draft form for review and then was interviewed by one of the ARD project team members. The purpose of these interviews was to gain information regarding the suggested changes and reasons for those changes. Specific areas in which alterations were made included: revisions in items requesting biographical information to make it appropriate for the age level of the current sample; the addition of certain areas on which knowledge exists or is important; the addition of relevant sources of information to rate on credibility; the revision of format to present specific settings for occupation; the identification of the most relevant range of occupations to include for reaction; accurate indication of the particular time periods for active and reserve duty; and the identification of the desirable comparisons of career paths to rate. With these revisions the Final Draft of the CIS was prepared. This Final Draft of the instrumentation was then reviewed by the ARD project team members for consistency and integration prior to the preparation of the form for use in the pilot project.

Pilot Testing

The purpose of pilot testing was threefold: to determine how individuals would respond to the various segments and items on the CIS; to gather descriptive statistics regarding this new instrumentation; and to compare individuals with differing perceptions and attitudes about ROTC across the sections of the CIS and the established instruments, the CDI and the VS.

Subjects

Subjects for the pilot testing included 64 male, college bound high school students ranging in age from 15 to 19 and in graduating class from 1987 to 1989. These students were solicited through advertisements in local newspapers in the Baltimore-Washington, D.C. suburbs. Each student was paid \$15.00 for his participation in approximately two hours of testing. In addition, subjects were asked to refer other subjects and were paid \$3.00 for each referral which they made. On the basis of their responses to the item indicating attitudes and feelings about Army ROTC, the respondents were separated into three subject groups. The positive group included twenty-two subjects, the neutral group included thirteen subjects, and the negative group included twenty-nine subjects.

The constellation of characteristics of the subject group is consistent with the type of college bound high school student that the Army ROTC seeks. 69% of the subjects had a B or greater average in a college preparatory program, with many of

the subjects coming from highly competitive school systems. Of those completing the SAT or PSAT (often in their sophomore or junior year), 86% had a composite score of greater than 900 and 52% had a composite score of greater than 1070. 98% of the subjects were involved in at least one extracurricular activity and 70% were involved in two or more activities. Of those indicating a choice of major field of study in college, 45% chose engineering or science. The parents of the subjects represent a highly educated group. 83% of the fathers and 56% of the mothers completed a four-year college degree. 43% of the fathers and 31% of the mothers completed an advanced degree. 57% of the subjects had a family member who was in the military service.

Testing Procedures

Once a potential subject contacted ARD regarding "participation in a career survey," either as a result of reading the advertisement or being referred by a subject, a preliminary telephone interview took place to determine the viability of the potential subject. The telephone interview ascertained age, gender, graduating class and the college plans of the subject. If the subject met the necessary qualifications, he was scheduled for a testing session. Parental and subject consent forms were sent to the subject with instructions to have them signed and brought to the testing session. Subjects were tested in small groups at ARD Corporate headquarters in Columbia, Maryland. At the time of completion of the instruments, subjects were paid the \$15.00 for their participation and told about the subject referral program.

Hypotheses - Questions

The information provided through the CIS, the CDI and the VS was used to examine how this college bound high school sample of males responded to a number of Army ROTC career-related dimensions. Additionally, differences within the sample group with regard to positive, neutral and negative attitudes about Army ROTC were related to the subjects responses to knowledge and importance of knowledge, credibility of sources of both information and advice, occupational-setting desirability, and career path preferences. Further, differences among the three subject groups with regard to the scales of the CDI and VS were also examined.

Thus, descriptive statistics, characterizing the sample as a whole, and comparative statistics, examining differences among individuals holding positive, neutral and negative attitudes about Army ROTC, were computed for the range of variables involved in this study.

Knowledge and Importance of Knowledge. With regard to knowledge held and its importance, three general areas were investigated: information about college; information about post-college commitments and requirements; and information about military career prospects. Data are provided regarding the actual knowledge held as well as the importance of such knowledge for this sample. Attitudes about ROTC may be positively related to the amount of knowledge held. The identification of areas which are considered important, but where little knowledge is held, can lead to efforts directed at better providing knowledge in such areas.

Credibility of Sources. With regard to credibility of sources of information and advice, three specific types of sources were investigated: family and friends; educational personnel; and military personnel. Specific attention was given to investigating differences with regard to credibility for providing accurate information in contrast to good advice. Such views regarding credibility can determine how best to present information and provide advice to both Army ROTC students as well as potential cadets. Differences among the three groups of subjects regarding their views of credibility of sources can also be instructive.

Desirability of Occupations-Settings. With regard to the perceptions of desirability of occupations and work settings, eight specific occupations were rated in general, and then each occupation was rated for the four specific settings of interest in this study: Army-military; Army-civilian; government non-military; and private sector. Interactions between occupations and settings can be instructive in understanding whether the settings differ in their desirability depending upon the particular occupation involved. Further, occupation-setting desirability differences across the three subject groups can provide valuable information about the types of individuals who have positive perceptions about the Army ROTC program.

Career Path Preferences. With regard to career path preferences, comparisons between differing lengths of duty, active and reserve duty commitments and choice of entry points into the Army ROTC program were made. General preferences as well as preferences of the three subject groups have been ascertained and can be helpful in understanding what potential Army ROTC cadets desire.

Career Maturity. Although no specific hypotheses are offered with regard to differences among the particular scales of the CDI, it is expected that those with more positive attitudes toward Army ROTC will score higher than those with neutral and those with negative attitudes toward Army ROTC on the variety of indices of career maturity.

Values. Specific hypotheses are not offered with regard to differences among the three subject groups in their responses to the VS. It is expected that a different pattern of value preferences exists among the three subject groups.

RESULTS

Results are presented in terms of the mean scores and statistical significance tests conducted for each of the four main content areas of the Career Information Survey: Knowledge and Importance of Knowledge; Credibility of Sources; Desirability of Occupations-Settings; and Preferences of Career Paths. Means are also provided for the scales on the CDI, and the VS scale patterns are presented. Subject group differences on the basis of views of Army ROTC have been investigated and reported. Wherever relevant, tabular information is presented in order to augment the text.

Knowledge and Importance of Knowledge

The mean ratings for knowledge of and importance of knowledge of information regarding the three areas of college issues, post-college commitments and career prospects for the three subject groups determined by attitude toward Army ROTC are presented in Table 1.

Table 1

Mean Ratings for Knowledge and Importance of Knowledge Regarding College Issues, Post-College Commitments and Career Prospects Related to the Army ROTC Program by Subject Group. (Defined by attitudes toward the Army ROTC Program)

		Group			
Content area		Negative	Neutral	Postive	Overall
College	Knowledge	1.61	1.75	2.38	1.91
	Importance	2.90	3.28	3.46	3.17
Post-college	Knowledge	1.49	2.04	2.53	1.96
	Importance	3.42	3.65	3.74	3.58
Career	Knowledge	1.86	2.02	2.83	2.23
	Importance	3.61	3.69	3.74	3.67
Total	Knowledge	1.65	1.94	2.58	2.03
	Importance	3.31	3.54	3.65	3.47

For knowledge about college issues, strong differences were observed among the three subject groups, $F(2) = 5.634$, $p = .006$. The positive group indicated much more knowledge than the negative group, $F(1) = 10.717$, $p = .002$, and the neutral group, $F(1) = 4.680$, $p = .034$. Although differences did not exist, between the neutral and negative group, $F(1) = .256$, $p = .615$. For knowledge about post-college commitments, strong differences were observed among the three subject groups, $F(2) = 9.619$, $p < .0005$. The positive group indicated much more knowledge than the negative group, $F(1) = 18.190$, $p < .0005$, and somewhat more knowledge than the neutral group, $F(1) = 2.619$, $p = .111$. The neutral group indicated more knowledge than the negative group, $F(1) = 3.673$, $p = .06$. For knowledge about career prospects, strong differences were observed among the three subject groups, $F(2) = 5.746$, $p = .005$. The positive group indicated much more knowledge than the negative group, $F(1) = 4.896$, $p = .031$. The neutral group did not differ from the negative group, $F(1) = .225$, $p = .637$.

No differences were observed for the importance of information across the three subject groups. This was observed for college issues, $F(2) = 1.265$, $p = .289$, post-college commitments, $F(2) = .373$, $p = .690$, and career prospects, $F(2) = .062$, $p = .940$.

Credibility of Sources

The means ratings for credibility of information and advice regarding Army ROTC from family/friends, educational military sources are presented in Table 2. No patterns of differences were observed across the three subject groups for either information or advice related to any of the sources, $F(2,61) = .0086$, $p = .918$. There were differences observed in the ratings of information and advice from the three sources, $F(5,315) = 9.030$, $p < .0005$. Military personnel are viewed as the most credible source of accurate information. Educational personnel are viewed as the most credible source of good advice.

Table 2

Mean Ratings for Credibility of Information and Advice Regarding Army ROTC from Family/Friends, Educational and Military Sources

Source	Area	
	Accurate information	Good advice
Family/friends	2.98	3.12
Educational	3.38	3.26
Military	3.66	2.82

Desirability of Occupations-Settings

The mean ratings for the desirability of the eight occupations, both in general and in specific settings, are presented in Table 3. Differences in desirability of setting were observed across all of the occupations. Probability levels in each instance were observed to be less than .0005 and F values were as follows: Physician, $F(3,183) = 41.273$; Lawyer, $F(3,183) = 39.524$; Accountant, $F(3,183) = 22.656$; Engineer, $F(3,183) = 21.008$; Psychologist, $F(3,183) = 28.447$; Computer Scientist, $F(3,183) = 9.765$; Business Manager, $F(3,183) = 33.199$; and

Research Scientist, $F(3,183) = 7.427$. In general, stronger preferences existed for the private and government settings in contrast to the Army civilian and Army military settings. For the Computer Scientist and Research Scientist occupations, such differences were not so pronounced even though the private sector setting was still the most preferred.

Table 3

Mean Ratings of Occupations by Specific Setting and In General

Occupation	Setting				Occupation in general
	Army-military	Army-civilian	Government non-military	Private sector	
Physician	2.97	3.39	4.16	5.23	4.31
Attorney	3.06	3.30	4.41	5.17	4.70
Accountant	2.63	2.69	3.42	3.97	3.22
Engineer	3.91	4.00	4.63	5.27	4.94
Psychologist	3.05	3.16	3.80	4.86	4.25
Computer scientist	3.63	3.73	4.11	4.67	4.20
Business manager	2.77	3.05	3.86	4.92	4.23
Research scientist	3.73	3.72	4.11	4.53	4.30
TOTAL	3.22	3.38	4.06	4.84	4.27

Additionally, for three of the occupations (Tables 4 to 6), differences were observed among the three subject groups: Engineer, $F(2,61) = 3.213$, $p = .047$; Business Manager, $F(2,61) = 3.383$, $p = .04$; and Research Scientist, $F(2,61) = 7.247$, $p < .0005$. In general, the positive group had more favorable views of these occupations across settings and also does not differentiate among the settings to the extent that the other two groups do.

Table 4

Mean Ratings of Engineer in Specific Settings by Subject Group

Group	Setting				
	Army-military	Army-civilian	Government non-military	Private sector	Occupation in general
Negative	3.76	4.03	4.52	4.97	4.97
Neutral	3.15	3.00	3.69	4.85	4.00
Positive	4.55	4.55	5.32	5.91	5.46
Overall	3.91	4.00	4.63	5.27	4.94

Table 5

Mean Ratings of Business Manager in Specific Settings by Subject Group

Group	Setting				
	Army-military	Army-civilian	Government non-military	Private sector	Occupation in general
Negative	2.14	2.52	3.38	4.86	4.14
Neutral	2.77	3.00	3.69	5.31	4.46
Positive	3.59	3.77	4.59	4.77	4.23
Overall	2.77	3.05	3.86	4.92	4.23

Table 6

Mean Ratings of Research Scientist in Specific Settings by Subject Group

Group	Setting				
	Army-military	Army-civilian	Government non-military	Private sector	Occupation in general
Negative	3.21	3.31	3.90	4.72	4.41
Neutral	3.23	3.15	3.15	3.77	2.92
Positive	4.73	4.59	4.96	5.00	4.96
Overall	3.73	3.72	4.11	4.63	4.30

Career Path Preferences

In defining the career paths compared by the study, the following scenarios were employed: Active Duty - 2 years active duty followed by 6 years of reserve duty; Reserve Duty - 3 months of active duty followed by 8 years of reserve duty; Long-term Active Duty - 20 years of active duty; Long-term Reserve Duty - 3 months of active duty followed by 20 years of reserve duty.

Differences in overall reaction, as well as certain differences by subject group, were observed in the ratings of alternative length of time for active and reserve duty career path assignments.

Mean preference scores of subject groups for active duty and reserve duty career paths are presented in Table 7. Although there was no overall preference for either active duty or reserve duty, $F(1,61) = .022$, $p = .883$, there were different preference patterns for those with positive attitudes and those with negative attitudes about Army ROTC, $F(2,61) = 9.174$, $p < .0005$. Those participants with a positive view generally rated both career paths to be more desirable than did those with a negative view. Also, those with a positive view showed a stronger preference for active duty in contrast to reserve duty career paths, while those with a negative view showed a stronger preference for reserve duty over active duty career paths.

Table 7

Mean Preference Scores for Active Duty and Reserve Duty Career Paths by Subject Group

Group	Career path	
	Active duty	Reserve duty
Negative	1.76	1.93
Neutral	2.15	2.15
Positive	3.18	2.96
Overall	2.33	2.33

Mean preference scores of subject groups for Long-term Active Duty and Long-term Reserve Duty career paths are presented in Table 8. There was no general preference for long-term reserve duty rather than long-term active duty, $F(1,61) = 1.635$, $p = .206$. Those with a positive attitude toward Army ROTC preferred long-term active to long-term reserve duty career paths, whereas negative and neutral subjects had the opposite preference, $F = 2.548$, $p = .087$.

Tables 8

Mean Preference Scores for Long-Term Active Duty and Long-Term Reserve Duty Career Paths by Subject Group

Group	Career path	
	Long-term active duty	Reserve duty
Negative	1.28	1.72
Neutral	1.39	1.77
Positive	2.18	1.86
Overall	1.61	1.78

Except for a generally more positive view of all the career paths by the positive attitude subject group, the overall preferences of all the subject groups for a number of career path comparisons were similar. Specifically, Active Duty was rated to be preferred more than both Long-term Active Duty (Table 9), $F(1,61) = 17.707$, $p < .0005$ and Long-term Reserve Duty (Table 10), $F(1,61) = 18.044$, $p < .0005$. Reserve Duty was rated to be preferred more than both Long-term Active Duty (Table 11), $F(1,61) = 19.778$, $p < .0005$ and Long-term Reserve Duty (Table 12), $F(1,61) = 26.573$, $p < .0005$.

Table 9

Mean Preference Scores for Active Duty and Long-Term Active Duty Career Paths by Subject Group

Career path		
<hr/>		
Group	Active duty	Long-term active duty
Negative	1.93	1.21
Neutral	2.23	1.54
Positive	2.91	2.18
Overall	2.33	1.61

Table 10

Mean Preference Scores for Active Duty and Long-Term Reserve
Duty Career Paths by Subject Group

Group	Career path	
	Active duty	Long-term reserve duty
Negative	1.76	1.31
Neutral	2.15	1.85
Positive	3.23	2.36
Overall	2.34	1.78

Table 11

Mean Preference Scores for Reserve Duty and Long-Term Active
Duty Career Paths by Subject Group

Group	Career path	
	Reserve duty	Long-term active duty
Negative	1.83	1.17
Neutral	2.23	1.69
Positive	3.23	2.27
Overall	2.39	1.66

Table 12

Mean Preference Scores for Reserve Duty and Long-Term Reserve
Duty Career Paths by Subject Group

Group	Career path	
	Reserve duty	Long-term reserve duty
Negative	1.76	1.31
Neutral	2.15	1.77
Positive	3.27	2.05
Overall	2.36	1.66

Career Maturity

The mean scores for the subject groups on the CDI scales are presented in Table 13. Differences in patterns of responses for the subject groups were observed for the Career Planning scale, $F(2,61) = 2.021$, $p = .141$. The subject group with positive attitudes about Army ROTC scored higher than the neutral and negative groups on this scale.

Table 13

Mean Scores on the CDI Scales by Subject Group

CDI scales	Group			
	Negative	Neutral	Positive	Overall
Career Planning	100.97	96.46	109.00	102.81
Career Exploration	113.52	106.46	108.96	110.51
Decision-making	103.41	98.00	101.91	101.80
World of Work Information	104.24	103.00	106.13	105.67
Career Development - Attitudes	108.41	101.61	110.46	107.73
Career Development - Knowledge and Skills	104.21	102.23	106.13	104.47
Career Orientation - Total	107.38	100.77	109.86	106.89
Knowledge of Occupational Group	114.13	108.78	113.00	112.43

Values

Difference scores were calculated between the overall score on each scale and the score of each subject group on each scale. Such scores were used to identify the three highest and the three lowest scale scores for each subject group. In the expression of priorities of values, a different pattern was observed for each of the three subject groups. The three highest and three lowest scales for each of the three subject groups are presented in Table 14. Those with positive attitudes toward Army ROTC attained the highest scale scores on Physical Prowess, Ability Utilization, and Physical Activity and the lowest scale scores on Cultural Identity, Social Relations, and Prestige. Those with neutral attitudes toward Army ROTC attained the highest scale scores on Social Interaction, Autonomy, and Advancement and the lowest scale scores on Ability Utilization, Achievement, and Physical Prowess. Those with negative attitudes toward Army ROTC attained the highest scale scores on Lifestyle, Prestige and Cultural Identity and the lowest scale scores on Physical Prowess, Advancement, and Risk.

Table 14

Highest and Lowest Rated Value Scale Dimensions by Subject Group

Rating	Group		
	Negative	Neutral	Positive
High	Lifestyle Prestige Cultural Identity	Social Interaction Autonomy Advancement	Physical Prowess Ability Utilization Physical Activity
Low	Physical Prowess Advancement Risk	Ability Utilization Achievement Physical Prowess	Cultural Identity Social Relations Prestige

DISCUSSION AND IMPLICATIONS

The Career Information Survey (CIS) was developed and administered with two existing instruments, the Career Development Inventory (CDI) and the Values Scale (VS), to a group of college-bound high school males. In addition to assessing background information (in order to describe the subjects) and attitudes and perceptions about Army ROTC (in order to identify three subject groups), the CIS assessed four variables of interest in learning more regarding how students think about the Army ROTC program. These variables included knowledge and importance of knowledge about the Army ROTC program, credibility of source of information and advice about the Army ROTC program, desirability of occupations within military and non-military settings, and preferences for alternative military career paths.

Initial drafts of the CIS were refined through input from a range of prominent subject matter experts. Even within the small group in which pilot testing was performed, differences in the expected direction were observed among students who had varying attitudes and perspectives about the Army ROTC program. The instrument will require further refinement through testing at a national level and after collecting data from college as well as additional high school students.

Despite the needs for further refinement, the results of the pilot study have important implications for how to approach and deal with both potential Army ROTC cadets as well as those who have already enrolled in the Army ROTC program.

The knowledge that the subjects had about the Army ROTC program and the importance of that knowledge for the different subject groups and across the content areas is particularly instructive. The strong relationship between greater knowledge of the Army ROTC program and more positive attitudes about the Army ROTC program suggests that strong benefits may result by efforts to convey more knowledge to potential Army ROTC cadets. Additionally, the most important area for conveying such knowledge relates to career prospects.

The results observed regarding credibility of sources of information and good advice suggest certain approaches which may prove fruitful in efforts to reach a college-bound high school student population. It may be extremely valuable for military personnel to present information because they are considered quite credible in that role. The offering of advice and good counsel might better come from educational personnel. Efforts could be made to enlist the support of educational personnel to provide advice and counsel to potential Army ROTC cadets.

Although the current study was restricted to high school students, it is possible that the findings regarding knowledge and credibility of sources would have similar relevance for college Army ROTC cadets. The provision of additional knowledge, especially regarding career prospects, through military personnel, and the availability of career development advice through educational personnel, might encourage retention within the Army ROTC program.

The ratings of desirability of occupations and settings contribute to an understanding of how students see the desirability of a military career. In general, Army military and Army civilian settings are viewed less favorably than government and private sector settings, although these preferences are not so pronounced for the Computer Scientist and Research Scientist occupations. Those with positive attitudes about the Army ROTC program are oriented toward rating more desirably specific occupations such as engineer, business manager and research scientist. Depending upon the particular manpower needs which the Army ROTC program is oriented toward filling, this finding may be promising. It may reflect the type of promotional activity oriented toward conveying the technical training and opportunities available within the Army. The finding may also recommend that future promotional activities be directly focused toward specific occupational areas where future manpower needs may exist.

Results regarding career path preferences suggest that different types of students may be inclined toward active duty as contrasted to reserve duty. Traditionally, as expected, those with positive attitudes about Army ROTC have a stronger preference for active rather than reserve duty. If the future involves a higher proportion of individuals who will fill reserve duty roles, then such opportunities might be perceived positively by another type of Army ROTC cadet. Future manpower needs for reserve officers might lead to attracting a broader range of students to the Army ROTC program.

With regard to career maturity, those with a positive attitude toward Army ROTC scored higher on the Career Planning scale than either of the other subject groups (negative and neutral). Such attitudes about exploring the career process and planfulness in preparing for one's future career are highly related to a positive attitude about Army ROTC. This finding suggests that programs directed at enhancing career planning both for potential Army cadets as well as for those already enrolled in the Army ROTC program may be worth initiating and/or expanding.

The results of the analysis of the work values scores indicate a pattern of priorities related to individuals who have a positive perception of Army ROTC. Areas of both physical prowess and physical ability as well as ability utilization are valued highly, while low scores were attained on the dimensions measuring cultural identity, social relations, and prestige.

The portrait of an individual who makes the most out of his talents, both physically and mentally, while at the same time has the independence to be less affected by prestige, social relations and cultural identity may be consistent with the requirements for an Army ROTC cadet and military officer.

To briefly summarize the results, knowledge about Army ROTC, and most specifically career prospects, is strongly related to having a positive attitude about Army ROTC. Accurate information can best be received from military personnel and good advice from educational personnel. Although the Army-military setting is overall less appealing than the private sector and government non-military setting, for certain technical occupations such preference is not so strong especially for those with positive attitudes about the Army ROTC program. Successful assignment to career paths that differ in commitment to active duty and reserve duty may require seeking different types of individuals for each of the duties. Fostering career planning may lead to more positive perspectives on the Army ROTC program and military careers, and value differences among individuals with positive and negative perspectives about Army ROTC may contribute to understanding the type of individual who is best suited to this type of position.

FUTURE EFFORTS

This Phase I research effort is the first step in a program of research aimed at developing an understanding of how the Army ROTC program and a subsequent military career are perceived in order to determine the types of programs to be implemented for recruitment and retention. The development of the CIS and its pilot testing has proved very fruitful in meeting the objectives of this study. It has demonstrated the feasibility of examining career-related dimensions in relationship to attitudes about Army ROTC. The following areas require specific attention:

The Refinement of the Career Information Survey

The Career Information Survey has proved to be a tremendous resource for gathering the data necessary to come to the conclusions in this pilot study. It has only been used with 64 college-bound high school males within a narrow geographical area. In order to become a more valuable tool, more data must be collected. Future data collection should include testing in different regions of the country, examining Army ROTC cadets and other college students as well as additional college-bound high school students, and including female as well as male subjects.

The Exploration of Individual Differences

Even within the small sample of subjects utilized in the current pilot study, the impact of individual differences was great. It is important to identify critical individual differences variables and direct specific recruitment efforts and programs at high priority target groups with messages particularly aimed toward the interests of those groups.

The Pilot Testing of Recruitment Programs Prior to Large-Scale Implementation

With current paper and pencil testing and physiological measurement technology, it is possible to assess reaction to promotional materials and programs prior to implementing such programs on a large scale. Experimental manipulation of a range of variables such as type of information, source of information, and modality of presentation for various target populations can insure the suitability and effectiveness of the eventual product.

The Development of a Model Career Information and Counseling Program

The importance of providing accurate information and good advice to both potential as well as existing Army ROTC cadets is essential. A combined program where such information can be provided by military personnel and such advice by educational personnel is likely to lead to an optimal outcome. It is proposed that a model program be developed for implementation at several campus ROTC units.

The primary focus for the Phase II effort will be in the further development and application of the Career Information Survey. The successful development in its initial stages of the Career Information Survey demonstrates the viability and utility of an instrument of this type. Although the first application has been with potential Army ROTC cadets from a suburban Eastern region, further development efforts are to focus on other samples of potential Army ROTC cadets as well as other populations both within and outside of the military.

The data collected in the current study was from 64 college-bound students residing in the Baltimore-Washington, DC suburban area. Without further data collection, these findings can not be generalized to either an urban or rural area or to other regions within the country. Further, this data reflected attitudes and perceptions of those not yet enrolled in college or in the Army ROTC training program. Data from a college population, both within and outside of Army ROTC, would be highly desirable to obtain in order to compare results with those of the current study.

Perceptions and attitudes about careers are important to obtain at a variety of stages. Three primary stages include time periods prior to training, during the training process and while on the job after training. Each of these time frames requires a somewhat different perspective regarding the specific variables to investigate, yet there are many similarities across these levels which make the general framework and specific items of the Career Information Survey applicable.

Commercial applications of the Career Information Survey go beyond its utilization in the military. It has broad applications to government and civilian settings, especially where there are existing or projected manpower shortages. There may be certain priorities established in identifying where such efforts can best be utilized. Such priorities may relate to national security or industrial competitiveness.

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APPENDIX
CAREER INFORMATION SURVEY (CIS)

CAREER INFORMATION SURVEY

CAREER INFORMATION SURVEY

The CAREER INFORMATION SURVEY asks you about your career goals and attitudes. SECTION I is concerned with background information. SECTION II through VII investigate your knowledge of and preference for careers in the military, government and private workplace.

Most of the questions ask you to choose the point along a range of responses that best describes your response. Please fill in the corresponding circle on the answer sheet. Unless the directions state otherwise, fill in only one circle for each question. Those questions that require you to write in a response are followed by the words "FILL IN".

I. BACKGROUND INFORMATION

1. What is your birthdate?

Month _____

Day _____

Year _____

2. What class will you be in during the 1987-88 school year?

High school junior..... ☐

High school senior..... ☐

College freshman
(i.e., 1987 high school graduate)..... ☐

3. When you took the PSAT / SAT, what was the total (math plus verbal, or composite) score? (If you took both tests, please respond with your SAT score. If you took the test more than once, indicate the most recent total score.)

(Fill in Only One)

1300 - 1600..... ☐

1221 - 1299..... ☐

1141 - 1220..... ☐

1070 - 1140..... ☐

981 - 1069..... ☐

901 - 980..... ☐

800 - 900..... ☐

Below 800..... ☐

Did not take either test..... ☐

4. What is / was your high school grade average?

(Fill in Only One)

Letter Grade Number Grade

A - to A +..... above 90 ☐

B - to B +..... 80 to 89..... ☐

C - to C + 70 to 79..... ☐

D - to D +..... 60 to 69..... ☐

Lower than D- below 59..... ☐

5. While in high school, in which of the following extracurricular activities do / did you participate?

(Fill in All Those that Apply)

Athletics / sports..... ☐

Student government..... ☐

Musical activities / drama / art..... ☐

Community activities / service clubs
(Key Club, Junior Rotary, etc.)..... ☐

Career Organizations
(FFA, 4-H, Junior Achievers, etc.)..... ☐

Journalistic activities
(yearbook, newspaper, etc.)..... ☐

Social clubs..... ☐

Foreign language club..... ☐

None..... ☐

Other (Fill in) ☐

6. If you are a college freshman, what school will you be attending in September, 1987? (Fill in)

If you are a high school junior or senior, list the colleges you are considering.
(Fill in)

7. What is your intended major in college?

Business

(accounting, administration, management, economics, advertising, etc.)..... ☐

Engineering

(architecture, all engineering disciplines)... ☐

Computer Science and Information Systems.... ☐

Science

(physics, chemistry, biology, mathematics geology, agriculture, forestry, etc.)..... ☐

Social Science

(education, communications, political science, sociology, etc.)..... ☐

Nursing..... ☐

Liberal Arts

(history, art, etc.)..... ☐

Other..... ☐

Undecided..... ☐

8. What is the population of the community in which you are spending / spent the majority of your high school years?

(Fill in Only One)

Large city (more than 500,000)..... ☐

Suburb of large city (within 30 miles)..... ☐

Mid-sized city (250,000 - 500,000)..... ☐

Suburb of mid-sized city (within 30 miles)..... ☐

Small city (100,000 - 249,999)..... ☐

Large town (50,000 - 99,999)..... ☐

Small town / rural (under 50,000)..... ☐

9. What are your parents' educational levels (highest degree earned)?

Father Mother

Did not graduate high school..... ☐ ☐

High school graduate..... ☐ ☐

Trade school..... ☐ ☐

Associate's degree..... ☐ ☐

Bachelor's degree..... ☐ ☐

Advanced / graduate degree..... ☐ ☐

10. What are your parents' occupations?
(Fill in)

Father _____

Mother _____

- 11a. Has any member of your immediate family (father, mother, brother, sister) served or is serving in any branch of military service (Army, Navy, Air Force, Marines)?

Yes ☐

No ☐

- 11b. If yes, indicate relationship (father, mother, brother, sister) and if in Active or Reserve Duty.

Relationship (Fill in) _____

Active..... ☐

Reserve..... ☐

Relationship (Fill in) _____

Active..... ☐

Reserve..... ☐

Relationship (Fill in) _____

Active..... ☐

Reserve..... ☐

Relationship (Fill in) _____

Active..... ☐

Reserve..... ☐

- II. Indicate to what extent you currently have knowledge about the following areas as they relate to the Army ROTC program and subsequent military service.

1	2	3	4	5
No Knowledge	Little Knowledge	Moderate Knowledge	Good Deal of Knowledge	Very Much Knowledge

- A. ROTC entry requirements..... ☐ ☐ ☐ ☐ ☐
- B. ROTC selection procedures.... ☐ ☐ ☐ ☐ ☐
- C. Major areas of study allowed.... ☐ ☐ ☐ ☐ ☐
- D. Scholarship possibilities..... ☐ ☐ ☐ ☐ ☐
- E. ROTC cadet responsibilities.... ☐ ☐ ☐ ☐ ☐
- F. Post-college commitments..... ☐ ☐ ☐ ☐ ☐
- G. Active Duty requirements..... ☐ ☐ ☐ ☐ ☐
- H. Reserve Duty requirements..... ☐ ☐ ☐ ☐ ☐
- I. Salary and benefits..... ☐ ☐ ☐ ☐ ☐
- J. Training opportunities..... ☐ ☐ ☐ ☐ ☐
- K. Career opportunities..... ☐ ☐ ☐ ☐ ☐

- III. In your consideration of enrolling in the Army ROTC program, indicate how important knowledge about each of the following aspects of Army ROTC would be to you in making your decision.

1	2	3	4	5
Not Important	Slightly Important	Moderately Important	Highly Important	Extremely Important

- A. ROTC entry requirements..... ☐ ☐ ☐ ☐ ☐
- B. ROTC selection procedures.... ☐ ☐ ☐ ☐ ☐
- C. Major areas of study allowed.... ☐ ☐ ☐ ☐ ☐
- D. Scholarship possibilities..... ☐ ☐ ☐ ☐ ☐
- E. ROTC cadet responsibilities.... ☐ ☐ ☐ ☐ ☐
- F. Post-college commitments..... ☐ ☐ ☐ ☐ ☐
- G. Active Duty requirements..... ☐ ☐ ☐ ☐ ☐
- H. Reserve Duty requirements..... ☐ ☐ ☐ ☐ ☐
- I. Salary and benefits..... ☐ ☐ ☐ ☐ ☐
- J. Training opportunities..... ☐ ☐ ☐ ☐ ☐
- K. Career opportunities..... ☐ ☐ ☐ ☐ ☐

- IV. When you consider enrolling in Army ROTC you will probably seek both information and advice from different people. Indicate how valuable the following sources would be for obtaining:

- a. Accurate information
b. Good advice.

1	2	3	4	5
Not Valuable	Slightly Valuable	Moderately Valuable	Highly Valuable	Extremely Valuable

- A. Parents
- a. Accurate information..... ☐ ☐ ☐ ☐ ☐
- b. Good advice..... ☐ ☐ ☐ ☐ ☐
- B. Sister(s) / Brother(s)
- a. Accurate information..... ☐ ☐ ☐ ☐ ☐
- b. Good advice..... ☐ ☐ ☐ ☐ ☐
- C. Friends / acquaintances
- a. Accurate information..... ☐ ☐ ☐ ☐ ☐
- b. Good advice..... ☐ ☐ ☐ ☐ ☐
- D. Friends / acquaintances-college students
- a. Accurate information..... ☐ ☐ ☐ ☐ ☐
- b. Good advice..... ☐ ☐ ☐ ☐ ☐
- E. Friends / acquaintances-adults
- a. Accurate information..... ☐ ☐ ☐ ☐ ☐
- b. Good advice..... ☐ ☐ ☐ ☐ ☐
- F. High school teachers
- a. Accurate information..... ☐ ☐ ☐ ☐ ☐
- b. Good advice..... ☐ ☐ ☐ ☐ ☐
- G. Coaches
- a. Accurate information..... ☐ ☐ ☐ ☐ ☐
- b. Good advice..... ☐ ☐ ☐ ☐ ☐
- H. High school counselors
- a. Accurate information..... ☐ ☐ ☐ ☐ ☐
- b. Good advice..... ☐ ☐ ☐ ☐ ☐

1	2	3	4	5	6	7
Highly Undesirable	Moderately Undesirable	Slightly Undesirable	Neither Desirable nor Undesirable	Slightly Desirable	Moderately Desirable	Highly Desirable

F. Computer Specialist

- a. Army-military.....
- b. Army-civilian.....
- c. Government non-military.....
- d. Private sector.....

G. Business Manager

- a. Army-military.....
- b. Army-civilian.....
- c. Government non-military.....
- d. Private sector.....

H. Research Scientist

- a. Army-military.....
- b. Army-civilian.....
- c. Government non-military.....
- d. Private sector.....

VI. Following are examples of the career paths that an Army ROTC cadet and Army officer may take. In each situation two different series of career stages (A and B) are presented for your comparison. For each pair rate the desirability of each option separately, and also indicate which of the two options is more desirable to you.

1. Career Stages

————— CAREER PATH A —————

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for two years;



Serve in Reserve Duty for six years while holding another job.

————— CAREER PATH B —————

Complete freshman and sophomore college years as non-ROTC student and enter Army ROTC by attending Camp Challenge (basic camp) during the summer prior to the junior year.



Complete remaining two years of college while enrolled in ROTC.



Serve in Active Duty for two years;



Serve in Reserve Duty for six years while holding another job.

1	2	3	4	5
Very Undesirable	Moderately Undesirable	Neither Desirable nor Undesirable	Moderately Desirable	Very Desirable

Desirability of CAREER PATH A..... ☐

Desirability of CAREER PATH B..... ☐

Which (A or B) is the more desirable career path?..... ☐ ☐ ☐

2. Career Stages

CAREER PATH A

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for three months;



Serve in Reserve Duty for eight years while holding another job.

CAREER PATH B

Complete freshman and sophomore college years as non-ROTC student and enter Army ROTC by attending Camp Challenge (basic camp) during the summer prior to the junior year.



Complete remaining two years of college while enrolled in ROTC.



Serve in Active Duty for three months;



Serve in Reserve Duty for eight years while holding another job.

1	2	3	4	5
Very Undesirable	Moderately Undesirable	Neither Desirable nor Undesirable	Moderately Desirable	Very Desirable

Desirability of CAREER PATH A ☐

Desirability of CAREER PATH B ☐

Which (A or B) is the more desirable career path? ☐ A ☐ B ☐ C

3. Career Stages

CAREER PATH A

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for two years;



Serve in Reserve Duty for six years while holding another job.

CAREER PATH B

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for three months;



Serve in Reserve Duty for eight years while holding another job.

1	2	3	4	5
Very Undesirable	Moderately Undesirable	Neither Desirable nor Undesirable	Moderately Desirable	Very Desirable

Desirability of CAREER PATH A ☐

Desirability of CAREER PATH B ☐

Which (A or B) is the more desirable career path? ☐ A ☐ B ☐ C

4. Career Stages

CAREER PATH A

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for twenty years.

CAREER PATH B

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for three months;



Serve in Reserve Duty for twenty years while holding another job.

1	2	3	4	5
Very Undesirable	Moderately Undesirable	Neither Desirable nor Undesirable	Moderately Desirable	Very Desirable

Desirability of CAREER PATH A..... ☐

Desirability of CAREER PATH B..... ☐

Which (A or B) is the more desirable career path?..... ☐ ☐ ☐

5. Career Stages

CAREER PATH A

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for two years;



Serve in Reserve Duty for six years while holding another job.

CAREER PATH B

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for twenty years.

1	2	3	4	5
Very Undesirable	Moderately Undesirable	Neither Desirable nor Undesirable	Moderately Desirable	Very Desirable

Desirability of CAREER PATH A..... ☐

Desirability of CAREER PATH B..... ☐

Which (A or B) is the more desirable career path?..... ☐ ☐ ☐

6. Career Stages

CAREER PATH A

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for two years;



Serve in Reserve Duty for six years while holding another job.

CAREER PATH B

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for three months;



Serve in Reserve Duty for twenty years while holding another job.

1	2	3	4	5
Very Undesirable	Moderately Undesirable	Neither Desirable nor Undesirable	Moderately Desirable	Very Desirable

Desirability of CAREER PATH A..... ☐

Desirability of CAREER PATH B..... ☐

Which (A or B) is the more desirable career path?..... ☐ ☐ ☐

7. Career Stages

CAREER PATH A

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for three months;



Serve in Reserve Duty for eight years while holding another job.

CAREER PATH B

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for twenty years.

1	2	3	4	5
Very Undesirable	Moderately Undesirable	Neither Desirable nor Undesirable	Moderately Desirable	Very Desirable

Desirability of CAREER PATH A..... ☐

Desirability of CAREER PATH B..... ☐

Which (A or B) is the more desirable career path?..... ☐ ☐ ☐

8. Career Stages

CAREER PATH A

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for three months;



Serve in Reserve Duty for eight years while holding another job.

CAREER PATH B

Enter Army ROTC as a college freshman.



Complete all four years of college while enrolled in ROTC.



Serve in Active Duty for three months;



Serve in Reserve Duty for twenty years while holding another job.

1	2	3	4	5
Very Undesirable	Moderately Undesirable	Neither Desirable nor Undesirable	Moderately Desirable	Very Desirable

Desirability of CAREER PATH A.....○

Desirability of CAREER PATH B.....○

Which (A or B) is the more desirable career path?.....○

VII. If you were given the opportunity to enter the Army ROTC program, how would you respond?

Yes.....○

No.....○

In general, which one of the following best describes your attitudes and feelings about the Army ROTC program?

Extremely positive.....○

Very positive.....○

Somewhat positive.....○

Slightly positive.....○

Neither positive nor negative.....○

Slightly negative.....○

Somewhat negative.....○

Very negative.....○

Extremely negative.....○

What are the advantages of enrolling in the Army ROTC program? (Fill in)

What are the disadvantages of enrolling in the Army ROTC program? (Fill in)
